

I 1934

1934-I

Lakeside Lab. 4/22

Prinic. west, etc  
water-levels, etc.

shore plants - high water level

Lakeside Lab. 7/31-

# Note Book

No. 188

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79

11

B. Shimek

Iowa City, Iowa, 529 Brown  
(or Lubenile Lab.)

1.66

## Expenses

June 2 <sup>nd</sup> Iowa City - Gas	1.50	oil	1.00	\$ 2.50 +
June 2 <sup>nd</sup> Ames - gas, -me 35			1.56	+ 35
Wilford gas & oil			1.86	
Board - Wash - for two			9.00	
order (return)			1.50	
June 29 - Board for two			9.00	
July 8 <sup>th</sup> " " " 2 days			2.60	
Jewell - gas & oil 1.67 + .27			1.94	
State Ceter station			.51	
				\$ 2.50
				1.91
				1.86
<u>\$ 6.27</u>	one way, I small meal			

June 22-1934 - Friday.

Left Iowa City at 5:48 am. We drove to Marion, cut across to Belle Plaine, and followed #30 to Ames.

We travelled through a good steady rain for 50 miles from Iowa City.

We reached Ames (Agic, Blk) at 9:10 am, and I went to Prof. Macdonald's office.

He took me to Dean Killeen's office, where I also met Mr. L. A. Schaeffer, the Federal Agent looking up marginal lands. I had a nine  $\frac{1}{2}$  hour visit with him and set out the advantages of the Little Sioux area.

Mosly prairie, but with other areas (hawthorn, woods, etc.)

Also early administration became  
Liberty had control and  
worked with both State Board.  
He has his head quarters at  
Wabons, Ill., where he was  
called for the next day,  
and promised to come up early  
in July.

We then drove north on  
#15 and stopped at Little Bull  
Lake. This is without water,  
excepting a very little on  
E. side.

For several miles N. of Ames  
trees have been planted  
irregularly, or in <sup>small</sup> clumps  
along the road.

The region was very dry  
until we reached Pali-ah  
Co. From then to the lake  
it was fresher, green, and water

appeared in ponds, etc. A very  
hot day.

We entered at the Wilford  
Park and reached the Liberty  
at about 5:10 pm.

Met Dr. Wolf & wife,  
Dr. Jaques, Rose, Carter, etc.  
Mr. & Mrs. Remley (one Drury)

etc. We located in the  
guest room of the cottage.

What prairie we saw  
looked green but sickly, -  
few bright colors.

In evening called on Dr. F. J.  
Smith, and arranged to go  
to Little Sioux Trail Monday  
morning.

June 23, 1934 - Sat.

Spent the day in arranging my papers and plats, and Marie helped me make measurements of buildings for plat on original Laboratory tract. The latter in the morning, and I platted them in afternoon.

June 24, 1934 Sun.

Worked on notes and plats. In afternoon we drove to Ann Upham (Marie's cousin) at Haywards Bay. Found her and had a short visit.

June 25, 1934 - Mon.

Wm. Booth Jr., Dr. F. J. Smith, Dr. Wolf, Dr. Anderson and I drove to the Little Sioux tract. We first examined the upper part of the tract, driving around and around north end, then going S. to sunken kettle hole, hanging bogs, spring creek, etc., and I selected parts suitable for preserve. All were greatly impressed with the area. We noted poor soil in cuts, etc., and much unbroken land. (See plat).

We then drove around S. and to meadow, and to Lab.

In afternoon I platted the area, making copies for Dr. Wolf.

Dr. Anderson, Dr. Smith, Mr.  
Schrenkman, etc. (spent 2  
days)

In evening at table the folks  
chanted a birthday歌

June 26, Tues. (1934)  
Spent day in making plots

June 27, 1934 - Wednesday  
Worked on notes and plots.  
Received telegram from  
President Jessup that Board  
of Education Committee would  
visit on Friday, & asking that I  
telegraph Chairman Judge  
Carlson.

Worked on notes for the  
meeting with Committee, and  
in early afternoon went to  
Wilford & sent telegram  
to Judge Carlson.

A hot day.

June 28, 1934 Thursday  
Worked on plats and on  
notes for meeting with  
Committee.

A hot day.

June 29, 1934, Friday.

In the morning I worked  
on plats and on notes for  
committee meeting until 3 PM.  
At 3 PM, the committee  
(Judge Carlson, Mr. Shull  
and Mr. Keenan arrived and  
we had an interesting session.

Dr. F. J. Smith, Dr. Wolf and I  
met with the committee.  
They stated the two bears -  
that Lab. would bear Grand,

and that cost would be great.  
I took up both points (in  
listen to Dr. Borlme) and  
Dr. Wolf also explained how  
cost of maintenance.

We all had the impression  
that the Board was well  
informed. We took them  
over the grounds and the  
property, showing its extent  
and usefulness from far and  
wide. Carlson stated that  
it might be well for us to  
be on hand at the Ames  
meeting July 10, if they con-  
cluded to rebuild.

June 30, 1934 Sat.  
Made additional measurements  
for flat with Mr. Lindley  
Worked on plants

July 1, 1934 Sun.  
Worked on plants. In the  
afternoon drove to Maria's  
cousin, Ann Upham at Haywards  
Bay. We had a short visit  
and returned via Arnold's  
Park and Milford.

July 2, 1934 Mon.  
In the forenoon I went  
out with Capt. Thorsen  
of the C.C.C. camp to get  
high water line and also  
to view park.

We worked on beach both  
north and west of Gull Point.  
Thorsen took levels (with  
flamingo)

On N. side we took elevation  
(works southward)  
Sta. 1. On bank (base) above sand  
& some boulders  $46\text{ in.}$  <sup>above lake</sup> <sub>Arnold's Park</sub>  $(= 106.0)$   
Sta. 2. Upper line of boulders.  $57\text{ in.}$  <sup>square</sup>  
above lake,  $(= 106.9)$

Sta. 3 - Upper line of beach plants  
S. side  $49\text{ in.}$  above lake  $(= 106.2)$   
Sta. 4 - Top of higher ice-shove <sup>sand</sup>  
 $67\text{ in.}$  above lake  $(= 107.7)$   
Sta. 5 - Top of lower ice-shove sand-  
ridge,  $50\text{ in.}$  above lake  $(= 106.3)$

Sta. 6- Top of boulder 48 in.  
above lake ( $= 106.2$ )

Sta. 7- Top of ice-ridge boulder  
ridge, 42 in. ( $= 105.7$ )

Sta. 8- Top of ice-ridge boulder ridge  
53 in. above lake ( $= 106.7$ ).

Sta. 9- Top of ice-ridge boulder  
ridge west, 49 in. ( $= 106.2$ )

Average = 106.4.

Reading at Arnold's Park  
gauge that day (by Mrs.  
Thorsen) = 102.15.

Last year, in Zemmer Park  
beach work, the Arnold's Park  
gauge read 103.08.

My estimate last year 3.5 ft

I also took notes on the  
beach plants and then lost  
them, so Marjorie and I drove

out & I went over same  
ground Wed., July 4. (see notes  
in that entry).

In the afternoon I  
worked on notes and plates.

July 3, 1904 Tuesday,  
In forenoon worked on notes  
and plates, and at 1:30 we  
drove to White's cottage just  
E. of Crescent Beach Hotel  
where Board of Conservation  
was meeting.

I presented the need of the  
purchase of the high point, and  
also reported on the Gull Point  
high-water level.

Worked on notes, etc., and in  
evening we drove to Milford  
and on return were caught in  
a terrific rain (+ thunder) storm,

July 4, 1934

worked on notes and plates  
Drawn in morning. In  
afternoon the Fish & Game  
Com. people (Dr. Brown, Mr. Rosen,  
Dr. Bode, Mr. Bauer (of Orleans),  
Mr. Goeden & their ladies  
(the secretary) called and  
the Lab. and we visited  
with them.

We then drove to Cousin  
Amis for a short visit, hoping  
to find Sally Allen (jailed)  
and returned to Lab.

July 5, 1934, Thurs.

In the morning Mr. Thorne  
took another reading on  
northern boulders above  
dock, showing 46 in. above lake.  
He & Mr. Sylvester (or Putnam)  
and I then drove to Lynd  
Pt. Park, and Mr. Sylvester  
and I went over the south  
(or museum) part and I  
suggested consolidation of  
refugee & pushing nature  
marks outward, with only  
one dip-in west and east.  
Also small parking area  
at Crescent Beach and was  
suggested by Mr. Sylvester.  
Men brought snake, taken  
among boulders. (See spec.)  
Drove back to Lab.  
The Park has area of 72 acres.

In the afternoon Marie  
and I drove to Gull Pt.  
and I took another list  
of beach plants.

N. of Gull Pt. I observed  
*Rhus glauca* fr.  
*Amorpha fruticosa* bl. fr.  
*Asclepias incarnata* fl.  
*Paeonia gunnii* fl.  
*Polamia brachystachys* fl.  
green ash (reddish)  
Common ("")  
*Xanthium* fl.  
*Polygonum convolvulus*

*Potentilla* (one sp.)

*Salix amygdaloides* (large stately)  
" *conigifolia*  
*Aimia* fl.

*Polygonum* (dark spot on fl.)

*Hordeum vulgatum*

*Artemisia caudata* very com.  
*Eriogonum canadense* - fl.  
*Ulmus americana* (reddish)  
*Fraxinus pennsylvanica* rev fl.  
*Chenopodium album*

*Lepidium apetalum* fl. fr.  
*Zizaniopsis miliacea* fr.  
" *zythophyllum* fl.  
*Urtica gracilis* few.  
*Asclepias syriaca* fl. few.  
*Lycopus americanus*  
*Oxybaphus myrtagineus*  
*Salvia hirta* var. nov.  
*Lactuca serriola* nov.  
*Millettia alba* - fl. few.  
*Ambrosia psidifolia* fl.

S. side of Gull Pt.

*Polamia brachystachys*

*Salix cinerea*

*Amorpha fruticosa*

*Xanthium*

*Chenopodium album*

*Polygonum lapathifolium*

" *pennsylvanicum*  
*Convolvulus sepium* fl.

*apocynum cannabinum* few  
*Amelanchier alnifolia* f.  
*Zuccariniu canadense*, fl.  
*Hordeum jubatum* fl.  
*Calystegia soldanella* var.

Acacia

*Polygonum Comosa*

On upper part of sand point:

*Sporobolus cryptandrus*  
*Pentstemon grandiflora*  
*Asteria canadensis* (very com)  
*Cyperus Schmidii*  
*Emex* (one spec.)

etc.

In afternoon I caught large snappy  
 $12\frac{1}{2} \times 18$  in., with 32 eggs.  
In the evening we drove  
to Woodcock's cottage at  
Terrace Park and I reported  
on Grill Pt. Park.

Woodcock informed me that  
the Board visited "High Point"  
but objects to fence and  
to buildings.

We discussed better  
management of marshes.

On return we were  
caught in another  
down-trap.

July 6, 1934, Fri.

In forenoon I made plots of  
our trap.

In afternoon Dr. Wolf, Dr.  
Anderson and I outline part  
of lawn, etc., to be cut, a

Dr. Anderson and I went  
over our prairie area  
from pheasant nest with  
7 eggs.

A cold day.

There had been rains here recently and things look fairly well, but the effects of the dry winter & spring are notable.

The prairie is coming back on on north 60 acres, and especially on the ridges.

I notice following:

*Bouteloua curtipendula* fl.  
" *oligostachys* fl.  
*Bizsium canescens* - in fl., no.  
*Petalostemum purpureum* R.  
*Prunella ciliolata* d. R. bas

July 7, 1934 Sat

I worked on the flats, then in the forenoon, and in the latter part of the afternoon I worked on the flat prairie, north of the road, while Margie drove to Milford.

I collected plants and noted also the following: (List not complete)

July 7, 1934

Flora native prairie (south)

*Eryngium yuccifolium* fl. - scat.  
*Bromus angustifolii* fl. scat.  
*Petalostem canescens* fl. scat.  
" *purpureum* fl. more common  
*Eriogonum ramosum* fl. (small blts)  
*Amelanchier canescens* fl. - common  
*Asclepias tuberosa* fl. (lower slope) few  
*Coreopsis palmata* fl. scat.  
*Stipa spartea* (mostly cl.) small - very com.  
*Silphium laciniatum* fl. scat.  
*Lithospermum angustifolium* lf. few

July 8, 1934 - Sunday

In the morning we did some parting and then Dr. Wolf and I drove to the Hanging bog S. of west end of Silver Lake.

The upper part of the bog had been dry earlier in the season and *Lycopodium complanatum* was restricted only to lowest part. The small *Utricularia* was also scant.

Very few plants were in flower, but I collected following (see mt):

*Sisyrinchium*

*Visca* fr.

*Liparis loeselii* - fr. (see 3 or 4 sp.)

I also collected Glycyrrhiza  
lepidota on the lower prairie  
where we stopped car.

It was mostly in flower (prime)  
but a few had green fruit.

We walked over quite a  
bit of the bog, but there was  
little color.

The violets were in the  
uppermost part of the bog on  
the matted peat between  
around the little pools.

The bog was disappointing  
partly because it was  
early and partly because of  
the early very dry spring  
season. There was very  
little color, as few plants  
were in bloom. The bog  
was evidently improving, as

there had been rains, but  
it was not as fine as last  
year.

We returned to the  
Calvary and packed  
for our homeward  
trip.

We left at 1:45 P.M.  
It was raining a little,  
but we soon passed  
through it, and while rain  
threatened all the way, we  
had none, though we  
evidently followed a storm  
(or storms) as the pavements  
were wet in many places  
before we reached Ames.

Beyond Ames the  
conditions were much drier,  
and there was less recovery.

in crops. We returned via Belle Plain and Marcy, and reached home at about 10 P.M. We had stopped for supper at State Center.

After returning from the hunting trip Marcy and I went over the Floete tract just south of the Lab. barn. This was once cultivated, and then grubbed or cut for hay, but it is coming back. I noted plants as listed on next page, & collected some.

On Floete just S. of barn.

*Oxybaphus mystacinus* fl. rev.  
*Verbena stricta* fl. frgms  
*Engelm. ramosa* fl. ? st. com.  
*Zizoloma stricta* fl. frgms  
" *Lythrum* fl. frgms.  
*Potentilla monilifera* fl. frgms  
*Aster multiflorus* fl. some clust  
*Kuhnia eriopoda* fl. low. com.  
*Physalis heterophylla* fl. frgms com.  
*Vaccinium* ? fl. ~~some~~  
*Phlomis stricta* com.  
*Ambrosia artemisiifolia* fl. com  
*Asclepias syriaca* fl. rev.  
*Rosa pratincola* fl. frgms com.  
*Apocynum cannabinum* fl. com.  
*Liatris pycnostachya* fl. few clust  
*Cornus alnifolia* fl. com.  
*Cirsium arvense* fl. frgms  
*Cirsium rivulare* few  
*Medicago sativa* fl. clust  
*Waldsteinia glabra* fl. clust

Lat 2 mi. E. Euphrate number  
both very com.

*Zizaniopsis miliacea* fl. fr. com  
" *erythronium* fl. com  
*Acacia verticillata* fl. 1.  
*Castilleja pallida* com  
*Solidago rigida* fl. scar.  
*Lactuca ludoviciana* fl. <sup>scar</sup> 3 sp.  
astroyal, com. fl. few clust.  
*Petalostemum* <sup>h. nov.</sup> *luteum* clump  
" com. of ~~few~~ few clust.  
*Andropogon furcatus* fl. few clump.  
*Helianthus grosseserratus* fl. near sea  
" *leptodon* fl. " "  
*Vitis vulpina* fl. fr. "  
*Gelidium* bracts fl. large clump  
*Oxalis* fl. com  
*Euphorbia manzanita* fl. off.  
*Cirsium canescens* fl. com  
*Alliaria officinalis* clump. fl.  
*Achillea tuberosa* fl. 2.  
*Heliosperma scabrum* fl. quite com  
*Acacia* open fl. few  
*Phragmites virginicus* fl. fr. com.

*Braunia amplexicaulis* fl. few  
*Burdock* fl. few  
*Oenothera virginiana* fl. clump  
*Delphinium nudicaule* fl. few  
*Syrophium occidentale* fl. scar.  
• *Achillea millefolium* fl. - patch  
50 <sup>fl.</sup> *Silphium perfoliatum* fl. (low) <sup>fl.</sup>  
*Artemisia ludoviciana* fl. 2 patches  
*Ceanothus americanus* fl. few  
*Lathyrus vernus* fl. patch  
*Desmodium canadense* fl. large clump  
*Thlaspi dasycarpum* fl. 1  
*Agropyrum tenue* fl. few.  
• *Frederia gracilis* fl. 1 fl.  
*Agropyrum Richardsonii* fl. com.  
*Phragmites communis* fl. at first patch  
10 <sup>fl.</sup> *Lithospermum canescens* fl. small patch  
*Acacia verticillata* <sup>lanceolata</sup> fl. 1  
*Isoloma heterostichum* fl. 1

Left at 1:45 P.M. at 244 57

6.7 to creek (outlet of lakes)

Lab. gate	-	0	Zone Park	99.52, 1/2
Turn east	-	0.4 1/2	New road	99.52, 1/2
" south	-	.7	Garrison	100.3
" east	-	2.7	(new road)	100.10
" S. to Milford	-	4.1/2	H. Clemmons road	107.3
Milford (amph)	-	5.3 1/2	Down River	107.8 1/2
" RR	-	5.6 1/2	Rosedale	113.0
Turn W. - Co. line	-	10.4	Co. line (Wyo)	114.1
" S - " "	-	10.8	Down river	117.3 1/2
Fosteria road	-	11.7 1/2	" "	117.6 1/2
# 18	-	15.5	Belmond	118.3 1/2
Spencer, RR	-	18.4	Iowa river	120.1
(71+13.) - turn E. -	-	19.6	" "	124.7
Dickens road	-	25.6	Co. line (Wyo) sold by	125.6 1/2
Co. line (Palo Alto)	-	31.1	Line #10	126.9
Ruthven	-	31.8	(Galena) RR -	128.6
# 17	-	38.8	(Strawberry S.)	
Des Moines river (new)	-	41.4	Co. line (Hamlin)	138.8
" " (old)	-	41.5	Blairburg RR	143.9
Emmett City - # 17 -	-	43.6	Jewell -	155.6 1/2
" RR	-	43.8	Little Piney Lake	158.7
Cylinder	-	51.6	Co. line (Story) -	163.3 1/2
Co. line (Kossuth)	-	57.1	Story City road	164.8
Whiteman road	-	58.0	RR	166.3
Algonac (west)	-	67.3	Ames - 15+ 30 -	176.1
Des Moines River	-	67.6	Boone river	177.3
Algonac (east)	-	68.3	Frederick 187.7	184.6
Sexton	-	74.6	RR (Custer) 187.7 road to 191.5	
Wesley	-	79.5	Colo - # 65	191.7
Co. line (Harlan)	-	81.2	Co. line (Marshall)	195.8
Hutchins	-	85.9	State Center	199.1
Britt	-	90.0	(turning) at 6.39 PM	
Single Lake road	-	93.1	starts at 7:05 PM	
Duncan	-	94.7 1/2		

38  
45  
40  
123

1<sup>st</sup> hr - 38 mi.

2<sup>nd</sup> hr 83" - 45

3<sup>rd</sup> hr 123" - 40

4<sup>th</sup> hr 161" - 38

*Siphium laciniatum* corniger  
E. of Glendale, Pala, San G.  
all small plants, - as elsewhere  
also many between Sinton &  
Wesley in Knott's Co. - all  
rather small.

Also similar to Cardiaspina of  
Kretschmar, Hanover.

*Verbena stricta* very abundant in  
*Verbena* beyond Ruth's all day.

All looks fresh & green to and  
beyond barrier,  
dead evergreen still along the  
line.

No water visible on Little  
wall rock.

Spring broken from toward  
area, but green from  
open toward marshy lower  
pastures still quite yellowish

Con.	State Center 1998 (town)	Locat. above 5 mi. (selected)
Brooks corner	249.5	
Marshalltown (PA)	214.3	Marion #6. 268.3
Le Grand	222.5	So. Anama 274.3
Co. line	222.8	C. n. S. R. R. 279.1
Wentworth	228.1	Homestead #4. 278.8 1/2
Iowa, 232.3		" RR 279.3 1/2
Zama	235.4 1/2	Co. Line 281.1
	236.6	Oxford 284.2 1/2
Chelsea	246.1	285.7
Belle Plaine #30	246.8	Tiffin 291.0 1/2
	252.8 1/2	Comanche 296.7 1/2
Iowa	255.4	Home 299.8
		R. I. Sam 233.7

Arrived at 2:59 + 5.

$$\begin{array}{r}
 299.8 \\
 235.4 \frac{1}{2} \\
 \hline
 64.3 \frac{1}{2}
 \end{array}$$

79 1/2  
64.3 1/2  
1/5

July 31, 1934, Tuesday - Oskaloosa

We left home at 5:33 AM.

The morning was cool and pleasant.  
Paul & Bertha (with Dorothy) left  
just before us for their home trip.

We drove via #161, #218 and  
#18 as far as Ruthven.

I tried a little unsuccessful  
trudging just beyond Cedar Falls

The unbroken pasture-prairie  
N. of Cedar Falls had much  
Verbena stricta, - other prairie  
plants evidently having been eaten  
by stock. The Verbena not eaten.

I stopped at Buffalo's Slough,  
at Mason City, but it was  
dry as a chip. Stock was  
feeding over it, and the road  
south of road at the sand pit  
was a hayfield, just cut over.

Aug. 18 - Down City  $\frac{1}{2}$  in <sup>150</sup> oil 10 2.50.  
Wefor gas 1,24

I tried dredging in the Iowa River (here a small creek) west of Garner, but stock tramped in it too much. There were several covered-in burrows of muskrats in the bank.

W. of Emmetsburg a farm on W. side of road showed much better small game east of grove at home than west of it.

This was notable in many other places along the route, east of Clear Lake (+ elsewhere). The trees on W. side of groves suffered much more. Scotch Pine, Arbor Vitæ & some spruces were dead all along.

Many thin trees all along the line on the prairies showed dead tops & many dead

individuals. Some of this is not this year's effect. Fields exposed fully to west are quite improving however (in uppers).

We took the county-road cut-off began Ruthven to East Sioux Lake.

The west side of the lake is entirely dry and there are wide beaches along the lower part east, very low. I collected a small Cyprinus with sandy bark.

We stopped at Mud Lake afternoon east between the lakes. There is some water visible. Yellow headed blackbirds were very plentiful & I saw several water birds. I collected

2 *Utricularia* plants in flower  
at edge of Mud Lake.

Across the road, W., were several  
clumps of very fine *Verbena*  
*stricta* among the common flora.

We drove by Green Slough (in  
Clay Co.) and it shows water  
in several places above the  
road. Could we run below road.

The fields and pastures  
along the entire route  
looked fresher & greener  
than on previous trip.

We reached the Cabotay  
after 4 P.M. and put up  
in the "guest room" of the cottage.

In the evening I talked  
with Dr. Wolf. I  
brought up 72 tubes with  
shells.

Aug. 1, 1934 - Wednesda  
Spent forenoon in writing notes &  
arranging papers, etc.

We first drove to Dr. Smith's,  
Vestergaard's and Myerly's (at  
Manhattan) to ask about cottages.  
Price at Vestergaard's \$25.00 per week  
at Myerly's \$12.50 to 22.50, &  
at Babcock's (at Manhattan) \$18 to \$25  
per week. In all cases all is  
provided except the linen.

In early afternoon I wrote  
notes. Then we drove to Milford  
for formalin & rubber cement.

In the evening I went to  
the 7 foot tall grass N. of  
road.

See plants on following  
page:

End is lower. Here a big bed of  
 Silphium perfoliatum (fl.)  
 Also smaller patch of Andropogon  
 furcatus - Westward, up slope a little  
 is a considerable patch of  
 Bouteloua eriopoda - down here  
 I often think it a few feet  
 of following  
 Amorpha canescens (br.)  
 Petalostem pruriens al. fr.  
 Eriogonum candidum fl. old field  
 Helianthus scabiosus, fl.  
 Lepidium campestre fl.  
 Andropogon furcatus fl.  
 Kuhnia v. corymbosa And  
 Equisetum  
 Carex praelevata - sp. late fl.  
 Liatris spicata lfl.  
 Aster multiflorus fl.  
 Solidago rugosa lfl. (green)  
 Allium stellatum lfl.  
 Gramineae argentea lfl.  
 Carex rostrata fl.  
 Equisetum laevigatum lfl. com  
 Carex virens lfl. lvs. fl.  
 Agrostis Richardsonii fl.  
 Solidago nemoralis lfl.

but well drawn. Ground  
 slopes down to low draw  
 In lower part - with Silphium perfoliatum  
 & Andropogon furcatus  
 Rosa pratincola fl.  
 Verbena stricta fl.  
 Glycyrrhiza lepidota fl.  
 Ambrosia trifida fl.  
 Asclepias tuberosa fl.  
 Artemisia dracunculus fl.  
 Agrostis capillaris fl.  
 Eryngium yuccifolium  
 Melilotus albus fl.  
 Carex sylvatica fl.  
 Eryngium yuccifolium fl.  
 Poa pratensis fl.  
 Allium vineale fl.  
 Solidago speciosa fl.  
 Bouteloua eriopoda fl.  
 Coreopsis palmata fl.  
 Ambrosia artemisiifolia fl.  
 Artemisia ludoviciana fl.  
 Proreola agerophylla fl. lvs.  
 Allium nelsonii lvs.  
 Petalostem cassinii fl.  
 Lepidium campestre fl.  
 Liatris scariosa lfl.  
 Stipa spartea old goat patch.  
 Petalostem pruriens al. fl.  
 Herbastrum avicinatum - fl.

*Apocynum cannabinum* fl.

*Rhus toxicodendron* lf.  
*Aster multiflorus* lf. sp.

*Panicum virgatum* b.

*Morinda mollis* lf. fl. scat

*Hedysarum occidentale* fl. b.

*Polygonum aviculare* fr. (few)

*Solidago canadensis* lf. towards  
Heuchera gros.

*Ostrya virginiana* fr. fl.

*Astragalus canadensis* fl.

*Andromeda polifolia* lf. few

*Kuhnia eupatorioides* fl.

*Aster laevis* fl. few

*Lacistemaudacum* fr. 1

In no place in these woods  
(except species named), but small  
patches of scattered species are

Lower down Heuchera ground  
is com. & still lower, Persicaria  
stroma - fr. & fl.

The Montezuma custipendia is  
down on a sort of upward slope to  
west, to lot

On upper part of main trail westward

*Artemisia caudata* b. few

*Liatris punctata* b. and very few in fl.

*Bromus oligospathus* fr. small patches

" *cristatulus* fr. scat

*Bramia austropepli* a. fl. scat

*Stipa spartea* a. - b. few

*Ericameria scabriuscula* fl. scat. frequent

*Hordeum vulgare* fr. few (disturbed by)

*Rosa pratincola* fr.

*Polygonatum multiflorum* fl. scat.

*Aristida (Muhlenbergia) clavata*

*Morinda mollis* lf. not com

*Agrimony Reticulata* a. fl. scat

*Solidago nemoralis* b. few

*Aster multiflorus* lf. scat.

*Corynephorus canescens* - few late fl.

*Anemone nemorosa* lf. scat

*Petalostylis composita* fl. scat frequent

*Aquilegia lyalliana* fr. - few

*Bastardia semipeltata* fl. scat

*Heuchera sanguinea* lf. b. 2 in fl

*Solidago nemoralis* scat. b. fl. "

" *rigida* lf. scat

" *minima* fl. scat

*Liatris scariosa* b. - scat

*Linnia heterophylla* fr. few

*Bromus tectorum* fl. few

*Agrimony Reticulata* fr. com

Coming in Marin found a  
young mink which had been  
killed by a car. We took it in.  
This is Lutreola vison <sup>Hillis.</sup> lepticauda  
which extends from N. Wis., and  
Minnesota to N. Ill. & Kansas.  
(This must be Ontarion vison Gmel.)  
Spent evening in walking  
niles and eating lamb

*Henckelia hispida* lf. few  
*Physalis virginiana* lf. few  
 " *luteola* lf. few also some  
*Poa compressa* fr. scat.  
*Comandra* lf. scat.  
*Silene pumila* common lf. few  
*Provalia involuta* lf. few  
*Erigeron reynoldsii* fr. few scattered  
*aster ptarmicoides* but few  
 " *reichenii* lf. scat.  
*Trifolium campestre* lf. 1 (sparsely)  
*aster laevis* lf. few  
*Astragalus caryophyllea* lf. few.  
*Sonicum leptocephalum* lf. few  
*Orlearia heterophylla* lf. few (1)  
*Cassinia am.* fr. well n.  
*Quercus coccinea* lf. few  
*Liatris scariosa* lvs. few  
*Solidago missouriensis* lf. scat.  
*Lathyrus venosus* lf. few

*Comandra myrsinifolia* lf. few  
*Spiranthes aestivalis* lf. (old stalk)  
*Thlaspi arvense* lf. few  
*Geum urbanum* lf. few  
*Geum urbanum* lf. few  
*Abutilon theophrasti* lf. few  
*Lithospermum canescens* lf. few  
*Lithospermum canescens* lf. few

	Flora prairie N. of road.
<i>Acerates virideflora</i>	few
" " <i>lanceolata</i>	fr.
<i>Schillea millefolium</i>	scat
<i>Agropyron Richardsonii</i>	fr.
" <i>Brithii</i>	few
" <i>Tenuum</i>	fr.
<i>Agrostis hymenoides</i>	few
" <i>alba</i> fsp.	fr.
<i>Allium canadense</i>	few
" <i>stellatum</i>	fl. fr.
<i>Amaranthus retroflexus</i>	
<i>Ambrosia artemisiifolia</i>	
" <i>psilostachys</i>	
" <i>trifida</i>	few
" " <i>integripila</i>	fl. few
<i>Amorpha canescens</i>	com
<i>Ampliaripa Ptilophora</i>	fl. fl.
<i>Andropogon furcatus</i>	out.
" <i>Scoparius</i>	fl. few
<i>Anemone canadensis</i>	fl.
" <i>cylindrica</i>	fl. few
" <i>Patens</i> var. sp.	fl.

<i>Antennaria neglecta</i>	
<i>Asplenium platyneuron</i>	
<i>Asplenium spinulosum</i>	fl.
<i>Asplenium scolopendrium</i>	fl.
" " <i>Hyperbifer</i>	fl.
<i>Aristida basiramea</i>	scat
<i>Artemisia caudata</i>	scat
" <i>Endoviciana</i>	few
" <i>dracunculus</i>	fl.
<i>Asclepias syriaca</i>	scat
" <i>tuberosa</i>	few
" <i>Andicola</i> var.	fl.
" <i>verticillata</i>	few
<i>Aster laevis</i>	fl.
" <i>multiflorus</i>	few
" <i>novae-angliae</i>	fl.
" <i>oblongifolius</i>	few
" <i>paniculatus</i>	few
" <i>ptarmicoides</i>	few
" <i>sericeus</i>	fl.
<i>Astragalus canadensis</i>	few
" <i>caryocarpus</i>	fl.

*Baptisia bracteata*

*Bontdona corynifolia* <sup>cm</sup> fl.

" *hirsuta* <sup>rev.</sup> fl.

" *oligostachya* <sup>cm</sup> fl.

*Branneria angustifolia* <sup>cm</sup> fl.

*Cacalia tuberosa*

*Carex festucacea*

" *stenophylla*

*Castilleja sessiliflora* <sup>fl.</sup>

*Ceanothus americanus* <sup>fl.</sup>

*Cirsium canescens*

" *discolor*

" *iowense* <sup>few</sup> fl.

*Comandra umbellata* <sup>fl.</sup>

*Convolvulus sepium* <sup>few</sup> fl.

*Coreopsis palmata* <sup>few</sup> fl.

*Delphinium nudicaule*

*Desmodium canadense* <sup>few</sup> fl.

*Elymus canadensis* <sup>few</sup> fl.

*Equisetum laevigatum* <sup>com</sup> fl.

*Erigeron canadensis*

" *ramosus*

*Eryngium yuccifolium*

*Euphorbia corollata*

" *maculata*

" *Pratense*

" *repens* fl.

*Fragaria virginiana*

*Galium boreale*

*Gentiana puberula*

*Gerardia aspera*

*Glycyrrhiza lepidota*

*Grindelia squarrosa*

*Hedysarum hispida*

*Helianthemum*

*Helianthus grosseserratus* <sup>fl.</sup>

" *Maximilianii*

" *scaberrimus* <sup>fl.</sup>

*Heliotropium scabrum*

*Henchera hispida*

*Hieracium canadense*

*Hordeum jubatum* few fr.  
*Hypoxis hirsuta*  
*Iva xanthioides*  
*Koeleria cristata*  
*Kuhnia eupatorioides* few fl.  
" " *corymbosa* fl.  
*Lactuca canadensis*  
" *Endoviciana* fl.  
*Lappula Redouxii* v.  
*Lathyrus venosus* few fl.  
*Lepidachys pinnata* few fl.  
*Lepidium apetalum* few fl.  
*Lespedeza capitata*  
" *leptostachys*  
*Liatris punctata* com fl. few  
" *pycnostachys* fl.  
" *scariosa* few br.  
*Linum sulcatum* few fl.  
*Lithospermum angustifolium* few fl.  
" *canescens* few fl.

{ *Melilotus alba* few  
" *officinalis* fl. R. few  
*Lobelia spicata*  
*Lycopodium junceum* few fl.  
*Monarda mollis* few fl.  
*Muhlenbergia racemosa*  
*Oenothera muricata* few fl.  
" *serulata* few fl.  
*Onosmodium occidentale*  
*Oxalis stricta*  
" *violacea*  
*Oxybaphus hispidulus*  
" *myctaginea*  
*Oxytropis Lambertii*  
*Panicum capillare*  
" *Leibergii* few  
" *Scribnerianum*  
*Pastinaca sativa* few fl.  
*Pedicularis canadensis* few  
*Petalostemum candidum* few  
" *purpureum* few  
*Phlox pilosa* fl.

*Physalis heterophylla* few  
" *virginiana* lf.  
*Poa compressa* few  
" *pratensis* few  
*Polygonatum verticillatum*  
*Polygonum Convolvulus* few lf.  
" *pennsylvanicum*  
" *ramosissimum*  
*Potentilla arguta*  
" *canadensis*  
" *montana*  
*Prenanthes aspera*  
" *racemosa*  
*Proraea aciphylla* few lf.  
" *esculentia* few lf.  
*Pycnanthemum flexuum*  
*Ranunculus septentrionalis*  
*Rhus glabra*  
" *Toxicodendron* few lf.  
*Rosa pratincola* few fr.

*Rumex altissimus*  
*Salix humilis*  
*Salsola kali* var.  
*Schoenoplectus lacustris*  
*Scutellaria parvula* few lf.  
*Setaria viridis* few lf.  
*Silene antirrhina*  
" *stellata* few lf.  
*Silphium laciniatum* f. fl.  
" *perfoliatum* com fl.  
*Sisymbrium caucasicum*  
*Sisyrinchium campestre*  
*Solanum rostratum*  
*Solidago canadensis* few lf.  
" *graminifolia*  
" *missouriensis* few fl.  
" *nemoralis* fl. br.  
" *rigida* few lf.  
" *speciosa angustifolia* few  
*Stipa spartea* com old

*Symplocarpus occid.*

*Zenarricum canadense*

*Thalictrum dasycarpum* <sup>var</sup> <sub>sp</sub>

*Tradescantia*

*Trifolium repens*

"

*Verbena hastata*

" *obtusa* <sup>few</sup> <sub>fl.</sub>

*Vernonia*

*Veronica virginica*

*Vicia americana*

*Viola pedatifida*

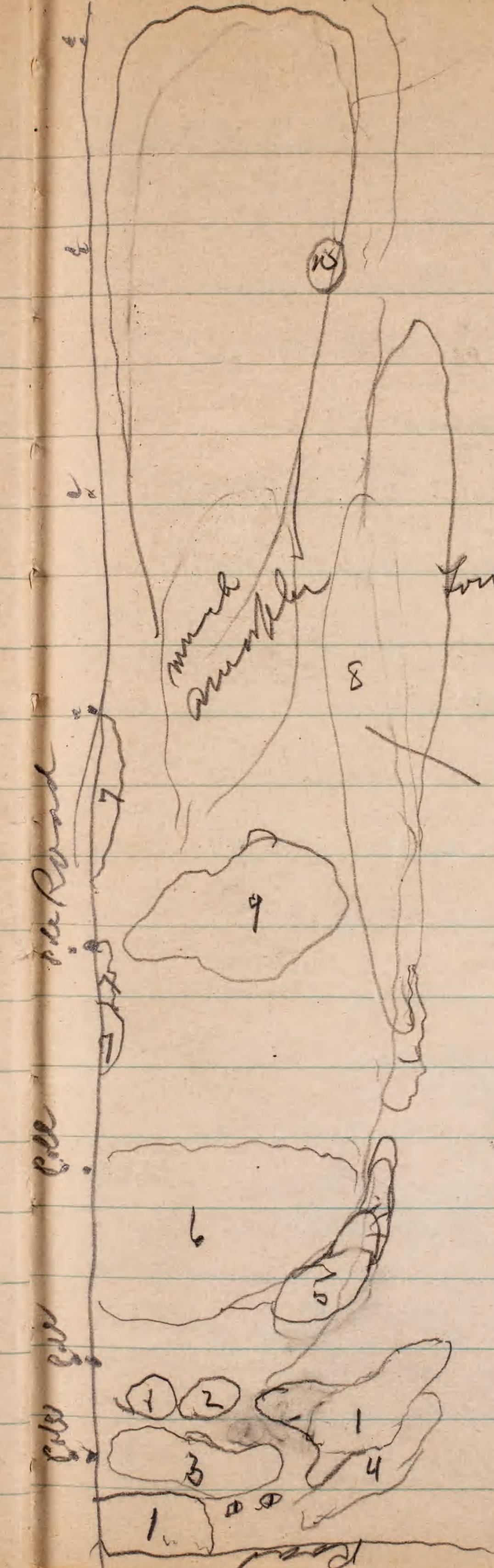
*Vitis vulpina* <sup>few</sup> <sub>fl.</sub>

*Zizia aurea*

" *caudata*

*Zygadenus chloranthus*

Road to Lake



- 1- *Silphium perfoliatum*
- 2- *Andropogon furcatus*
- 3- *Stipa tenuis*
- 4- *Heuchera grossularifolia*
- 5- *Spiraea canescens*
- 6- *Bontekoea ciliolata*
- 7- *Heuchera scaberrima*
- 8- *Petalostem canescens*
- 9- *Amelanchier canadensis*
- 10- *Liatris scariosa*

The upper (S) part of the Flats prairie  
is well carpeted with grass, mostly  
*Bouteloua eriopoda* & *Stipa ciliata*, but  
the most common plant is *Amorpha*  
common, all over the area.

This & the *Solidago*, *Petalostemum*,  
*Coryneph*, *Kuhnia*, etc. rise above  
the grass, & the *Aster* will join them.

On the flatter, low ground to the  
N. *Amorpha* about disappears  
*Petalostemum candidum* is very common,  
the plants are more vigorous, & the  
following are striking

*Petalostemum candidum* fl. very com  
*Asclepias speciosa* fl. few  
*Kuhnia ciliata* few -  
big red flowers fl. com & large  
*Stratiotes aloides* fl. lf. com  
*Panicum integrifolium* fl. few  
*Liatris pycnostachya* fl. (much more  
common & larger than *speciosa*)  
*Veronica virginica* clv. fl. few  
*Andropogon furcatus* few larger & more fragrant  
*Polygonum perfoliatum* fl. more com

*Solidago laciniata* fl. few - large  
*Solidago missouriensis* low com. large  
*Liatris ligulistylis* fl. few - out.  
*Desmodium canadense* fl. frequent  
*Polygonum aciculatum* fl. few - bright  
*Pedicularis canadensis* lf. rare  
*Artemesia ludoviciana* lf. rare  
*Phleum pratense* fl. frequent  
*Zizaniopsis miliacea* fl. rare  
*Liatris ligulistylis* fl. few.  
*Asclepias melilotoides* fl. fl. (along draw)  
*Agropyrum stroblii* fl. few  
*Agrostis alba* fl. few  
*Helianthus scaberrimus* fl. few.  
*Petalostemum candidum* fl. few  
*Oenothera laciniata* fl. few  
*Solidago virescens* fl. few - out.  
*Astragalus canadensis* fl. few.  
*Solidago missouriensis* fl. few.  
*Andropogon furcatus* fl. com, low down  
*Solidago rigida* fl. fl. few.  
*Geum urbanum* fl. fl. few  
*Liatris scariosa* low few  
*Bouteloua eriopoda* fl. fl. out few.  
*Gramineus angustifolius* fl. fl. few.  
*Cirsium rivulare* fl. few.  
*Arctium lappa* fl. fl. few - out.  
*Helianthus grosseserratus* lf. com. further E.  
*Allium stellatum* low few  
*Veronica gracilis* fl. few - lower  
*Rhus typhina* fl. few

The lower part (not wet) is  
dominated largely by *Andropogon*  
forbs.

*Ligustrum* & *Heliotropium* are conspicuous  
in the lower part, - lowest depression

Aug. 2, 1934 - Thurs.

I worked on the lower part of the  
Flute prairie - the notes freed  
In the afternoon I worked on  
mollusks for lecture, and on notes.

Paul & I collected *Dermatophyton*  
in bl. & fr.

Spent evening on Mollusk lesson.

August 3, 1934 - Friday

In the morning Marjorie and I  
drove to the Silver Lake hanging bog.

I collected swamp plants for sections  
(see vials) from both parts of the bog.  
The farther (E.) part is better, - in  
better condition. Few plants were in  
flower.

Marjorie  
& also picked up some Succulenta  
retusa under pieces of wood on the  
swampy flat. & also *Lycopodium*  
*coleatum*, chiefly in bog.

I wrote to Ella for shells for zoology  
& we drove to Milford with mail &

Later Anderson, Rose and I drove  
to Little Spirit Lake. Dry, with great  
mud-cracks. Much low talus. The wood land  
was very dry, & Spirit Lake low & pooly,  
stopped at Marble Lake (dry here) &  
Deep Lake was very low. At Temple

Aug. 4, 1934. Saturday.  
Spent forenoon in plants & preparing  
for my talk at the Inn.

At 2 P.M. we drove to the Inn,  
and at the pavilion I talked to  
the Okoboji Protective Association.  
A small meeting.

I reminisced & then noted 4 points:

- 1 - Keep sewage out of lakes
- 2 - " cattle out of lakes
- 3 - Prevent erosion.
- 4 - Each individual clean up.

Well-received and I was asked  
to write it up and send to the  
Secretary, Mr. L. P. Babcock, Spirit  
Lake, for distribution.

Sunday, Aug. 5, 1935 - Sunday.

We (Marie, Mrs. Anderson & I) drove  
to the Methodist Camp ground to  
hear Bishop Seger preach. (An

elderly, lame man, of the Evangelical  
Church. Preached on the efficacy of  
prayer.)

In the afternoon I worked in  
plant of buildings fund. Wolf.  
Hot during day, evening cool.

Aug. 6, 1934, Monday.

In the forenoon we drove to  
Wilford and I had fine chicken-  
fence screen made for the farm.  
Anderson hasn't been using them,  
birds! He also has no anemometer.

We drove with sample outfit over  
after supper - we took a  
road, where line crossed across

our north 40 A., and in the  
evening we drove to Woodrake's, but  
he was gone. Later he came to

cottage and we had a long conference.

He will want evidence for Gull Pond  
meals discussed now.

Later I drove to Dr. Smith's with McKinstry, & we conferred on the road.

Aug. 7, 1934 - Tues.

Measured S. part for map with McKinstry.

In afternoon I worked on notes, plots, and mollusks. We drove to Milford.

In the late afternoon Margie, the Andersons & I drove to E. side of Spirit Lake, - in our car.

Aug. 8, 1934. Wednes.

In forenoon I measured for map with Mr. McKinstry. West & north.

In afternoon I worked on plots and on mollusk lesson. Drove in the evening.

Aug. 9, 1934. Thursday

In forenoon I worked mostly on mollusk lesson. Towards noon Mr. Gilson of Des Moines & Mr. Alexander, clayman on Des Moines beach, came to consult about pollution of the lake. They had been induced to do so by the newspaper account of my talk at the Inn. I gave them the substance of it, & they want copy.

Spent afternoon in improving key (largely from memory) to the genera of the mollusks of the Ohlberg region.

Rained at night. Has been cooler;

Friday, Aug. 10, 1934

Spent forenoon in lab with  
Mollusk people lectured, & then  
used key for genera

In the afternoon we went to the field.  
It had rained some, & this helped.  
We worked in woods at Jumping house &  
at Beck's spring (found *Bifidum* common  
most common of Red elm, but some in  
green ash & bass in Barnwood).

We then went to the sand spit  
& collected living *Succinaria*, *area*,  
& *S. retusa* on wet beach (somewhat  
muddy) & also picked up driftwood  
shells. Altogether we found  
23 species. Mr. Taylor, Mr. Wells,  
Miss Hansen, Miss Jensen and Miss <sup>(now)</sup> Hickwood  
went out with me.

After supper Dr. Hayes & I went  
to the Lookout and I observed  
the following:

Upper part of Lookout

*Helianthus scaberrimus* <sup>top</sup> few  
*Eryngium yuccifolium* few  
*Amorpha canescens* few com  
*Bouteloua aristata* fr. frequent, red  
*Rosa* few frequent, red  
*Scirpus americanus* few - no  
*Salvelinia canescens* fr. out of season  
" *Prunus* <sup>purple</sup> few  
*Aster laevis* few - com  
" *Solidago* <sup>yellow</sup> few - few in fl.  
" *variolosa* few - red clust  
*Andropogon furcatus* fl. few  
*Corylus nelsonii* fl. fl. (few) frequent  
" *anthemum* <sup>yellow</sup> fl. few  
*Helictotrichon scabrum* fl. few  
*allium* <sup>yellow</sup> few - few, red  
*Syngonium rotundum* fl. few  
*Kuhnia* var. <sup>purple</sup> few, fl. few  
*Lycopodium punctatum* fl. few  
" *Cantharis* am. fl. few  
*Agrostis Richardsonii* fl. few - red  
*Bromus pallidus* fl. few  
*Stipa shortiana* fl. frequent, red  
*Solidago nemoralis* few fl. red  
*Asclepias canescens* few few  
*Elymus canadensis* fl. few  
*Oenothera missouriensis* fl. few  
*Aster multiflorus* few, red  
*Passiflora quadrangularis* fl. few for br.  
*Cirsium roseum* fl. few  
*Lathyrus vernus* fl. few  
*Aster sericeus* fl. few red  
*Solidago missouriensis* fl. red few, fl.  
*Phlox diffusa* fl. -  
*Phlox diffusa* fl. -

36 *Erigeron canus* deb. few  
*Lithophragma canescens* fl. few  
*Anemone cylindrica* fl. few  
40 *Comandra umbellata* fl. dry soil. sea.

*Aster ptarmicoides* fl. 1  
*Andropogon scoparius* br. fl. few  
*Artemisia ludoviciana* br. br. br.  
*Lactuca ludoviciana* br. 3

entirely destroyed. They are  
trying to raise red clover, &  
there is (on an average) about 1 small  
to a square yard.

Spent the evening with the  
Ames guests in living room of  
large cottage.

Lower down, eastward, is  
*Andropogon furcatus* fl. com  
*Diphylle laciniata* fl. few  
*Solidago canadensis* br. clump.  
*Troxopoda* — br.  
*Verbena stricta* fl.  
*Helianthus grosseserratus* fl. com.  
*Euphorbia corollata* sp. 1

Towards evening about 20 Ames  
people came in, headed by Misses  
Dickey and Loomis, - the latter an  
instructor in Botany.

We were caught in snow on  
the 2<sup>nd</sup> lookout. This has been

Aug. 11, 1934. Sat.  
Mucky & rainy. The Ames people  
went out to see our prairie with  
Dr. Anderson. On return, Loomis  
asked him if we rented the  
prairie for pasture!

I worked indoors on plants  
of a new mollusk key in which  
habitat will be less essential.

Miss Hayden came with her  
father, & left in the evening.

Aug. 12, 1934. Sunday

I had an attack of the intestinal trouble which has been epidemic in this region. It was wet & blustery, too, and as we hastened home dinner early on account of the Amos visitors, we did not go to church.

I worked a little on plants, etc., and slept much of the afternoon.

The Amos people left in the afternoon.

Aug. 13, 1934. Monday

Still blustery a part of the day. I was rather weak, but in the morning I made measurements with McKinstry around the pumping house and northward, to the Myrick tract. Slept much of afternoon & visited in laboratory in evening.

Margie and I drove to Spring Lake towards evening.

Aug. 14, <sup>1934</sup> Tuesday

At 4 am. a cloud covered about  $\frac{1}{2}$  of sky to east, but it thundered in the west, and rained here!

A heavy rain about 7 am.

Mr. Van Baur, the superintendent of the hatchery, and Mr. <sup>Everett</sup> Speer came over to confer about work to be done. They are quite willing to cooperate. Mr. Speer wants me to show him plants suitable for planting in water & on banks, as at Storm Lake, & we will go Thursday, cleared up.

<sup>Mr. Jacobs</sup> Mrs. Frankel, her father (of Rock Island) & her daughter called.

At 2:30 pm. Mr. Geo. Shiple & Sheldon came to consult about

hybridization, & about preparation  
of materials for sectioning.  
Wants methods in his toto.

I made barometer altitude measurements  
from 100 ft. to 61 ft., & checked first  
30 ft. with tape measurements. Agreed.

The ladies from near Bluff (Eagle)  
Point, brought a lot of plants  
for identification, - some last  
years. Will come later with more.  
Spent evening in writing notes  
and checking mollusk key.

August 15, 1934, Wednesday.  
It rained at night and in the  
morning, - over 1 in. of water fell.

I tried the new mollusk key  
with the class, & spent forenoon in  
notes, reading, etc.

Quite wet all forenoon.

In the afternoon I took altitude readings  
at cottage & south, & collected Gastropoda  
costaricensis at Buck's spring. I found  
about 530 on the 3-divided Red Elm,  
and about 30 on a double Green ash.  
Took a nap.

We drove to Milford and to  
Spirit Lake. Mr. Rose told me  
that I was asked to speak at the  
Spirit Lake Protective Assn meeting  
Friday evening.

Dr. Wolf and the Remleys drove  
to Iowa City.

Day cleared up in the afternoon.  
Spent early evening in putting  
Gastropoda away, and in writing  
notes.

Aug. 16, 1934, Thursday.  
A bright morning, with a very  
heavy dew.

I went out with Everett  
Speaker & Mr. Rose to  
Terrace Park.

We had a long visit with  
Bill Woodruff, President of the  
Board of Conservation, and  
Raether Pollution, etc.

We then looked up sand  
plants suitable for sand bars.  
These are to be used at St. Paul  
Lake & elsewhere. I noted:  
*Sporobolus virginicus* } the best.  
*Artemia sandata*  
*Cyperus schweinitzii*  
*Amphioxys fontana* (very good)  
*Potentilla peruviana*

also various prairie plants coming in

In the afternoon we looked for  
beach plants around Little Valley  
Bay & ist. bays.

I collected a few *Cleopodium*  
Botrys in woods N. of Lab.

Aug. 17, 1934 - Friday.

Made some altitude measurements,  
but visited most of the day, as  
I was about used up.

At 5:15 Mr. & Mrs. Frink  
called for us & took us to  
dinner at Templar Park. At  
8 PM, I talked to the Saint  
Lake Protective Assn. and  
Allen of the Estherville Enterprise  
Wednesday. I emphasized:

Pollution

sewage

cattle

Toilets & mobil

Evaporation

Plant trees

Later I learned (from Woodcock) that Forreman, the Co. Eng. who put in our septic tank, etc. objected to my talk & said that we (at the Lab.) ought to clean up first before telling others what to do, and that he did not observe the regulations of the Board of Health when he put our system in!

(I am taking this up.)

Woodcock gave a straighter from the shoulder talk on pollution.

Mrs. Finch brought us back.

Aug. 18, 1934 - Saturday  
Made some altitude measurements and visited a part of the day. Also worked on flats for Darling & Wallace ( & Mrs. Franklin.) - Just before noon we saw Woodcock & Way of the Highway Commis.

Aug. 19, 1934 - Sunday.  
Spent most of day on flats and notes on letters to Wallace & Mrs. Franklin.  
In the evening I conferred with Dr. Wolf & Dr. Jaques relative to future work at the Lab., etc.

Aug. 20, 1934 - Mon.

Spent day waiting for Mr. Way, but wrote letters (to Wallace, Mrs. Franklin, etc.) and took some altitude measurements.

Aug. 21, 1934 Tues.

Took altitude (Barometric) measurements for topographic map.

After supper Mr. Way of the Highway Commission & Mr. Call ofтивs Co (his friend) came up to look at our road.

The engineers are trying to widen the road to 100 ft, taking 17 ft. off the Lab. land.

Both are old timers in N. Iowa, & both were much impressed with our trying to save some prairie. I also need attention to the need of saving the cattle hole.

Mr. Way promised to do all he could to save it for us, & wants to keep in touch with me.

Conferred with Dr. Anderson & Mr. Rose in evening as to future work at La.

O. A. Giltner  
4006 Grand Ave  
Des Moines 8

Des Moines Beach

Mr. Frink

Mr. Allen

S. P. Baur, Fish-holding  
Orleans, Iowa

Everett Speake (Orleans) home in Arnold's Park, Ia

*Aphanogomodon*

Grapes out late.

+ clear strip all around  
Lab.

Rank plants all trees

Lawn in front

Clear around flag.

S. cottages now to path

+ then 10 ft. strip around

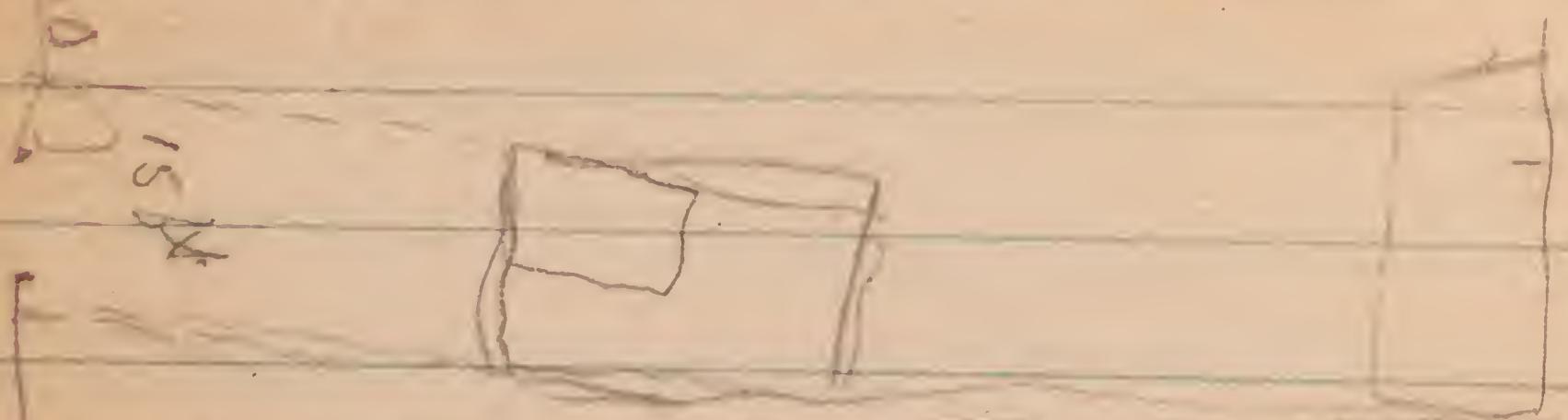
at girls dormitory - + clear  
N. side & triangle to path

Buck House - to row S. +

10 ft. W. &

small cottages 8 ft

grape vines out



West garage Lake fence & grapes out

tear out old ticks -  
10 ft. strip

Don McGowen?

Wisconsin alpoe

